## ENTOMOLOGICAL NEWS

## A Key to the North American Species of Macrolophus with Descriptions of Two New Species (Hem.: Miridae).*

By Harry H. Knight, Ames, Iowa.

It now appears that three species have been passing under the name Macrolophus scparatus Uhler, all of which have the same general color aspect yet differ distinctly in the structure of antennae and head, not to mention a few minor characters. From a study of the original description of separatus Uhler it is impossible to know the type locality of the species and likewise the particular specimens from which the description was drawn. If the type is selected from the Grenada specimens it is possible that the species might prove different from the form here redescribed. For the present I determine separatus Uhler as the species with hemelytra having a fuscous point at base of each hair except on narrow outer margin, and in distribution found from the transition to lower austral life zones.

The best characters for distinguishing the species of Macrolophus appear to be in the relative length of antennal segments, width of head and vertex, size of eyes and position, and width and length of the pronotum. The genitalia appear to be generic in character, and noteworthy in having the right clasper greatly reduced and inconspicuous: and in this connection I have studied the genotype, Macrolophus mubilus (H. S.).
Macrolophus separatus (Uhler).
1894 Dicyphus separatus Uhler, Proc. Zool. Soc. London for 1894, p. 194.

The form I take to be separatus Uhler has the following characters: $0^{7}$. Length 4.3 mm . Head: width .54 mm ., vertex .28 mm .; lateral width of an eye .20 mm ., space between eye and pronotal collar, 114 mm .; without trace of a fuscous vitta behind dorsal margin of eye. Rostrum, length 1.79 mm .,

[^0]scarcely attaining posterior margins of hind coxae. Antemae: segment I, length . 38 mm ., black; II, 1.17 mm ., yellowish. narrow apex blackish; III. 1.28 mm ., slender, yellowish to dusky; IV, . 51 mm ., fusco-brownish. Pronotum: length . 66 mm., width at base 1.06 mm .

ㅇ. Length 4.2 mmn . Head: width .56 mm ., vertex .285 mm .; lateral width of an eye .20 mm ., space between eye and pronotal collar .114 mm . Antennac: segment I, length $.3+\mathrm{mm}$.: II, 1 mm ., practically equal to width of pronotum at base: III, 1.2 mm ; IV. . 52 mm .

Plesiotypes: ${ }^{\text {T, }}$ ㅇ, Sept. 22, 1907. Iessville. Indiana (W. J. Gerhard). Records: Alabima-of August, 1918, Kushla (A. H. Sturtevant). District of Columbia-? July 27, 1885, $\delta^{\lambda}$ August 5, 1885, Washington (O. Heidemann) ; these specimens determined as sefaratus by Uhler. Florida-o 9 , "Jacksonville." Illinols-o' August 4, Chicago (IV. J. Gerhard). Indiana-o if September 22, 1907, Hessville (W. J. Gerhard). Maryland—29 August 7. Amnapolis Junction; $\delta^{19}$ September 11. 1892, Blandensburg (O. Heidemann). North Carolina-2q July 25, Tryon (IV. F. Fiske), collected at light.
Macrolophus longicornis new species.
Color characters suggestive of scparatus Uhler, but distinguished by the longer antennae as compared with the head and pronotum; length of antemal segment I equal to (f), or greater than ( $0^{\circ}$ ) width of head.
$\sigma^{7}$. Length 4.5 mm ., width 1.03 mm . Head: width .48 mm ., vertex .27 mm . ; lateral width of an eye .156 mm ., space between eye and pronotal collar . 14 mm . Rostrum, length 1.76 mm ., nearly attaining posterior margins of hind coxae. Antennae: segment I, length . 51 mm ., pale, apex blackish; III, 1.52 mm ., slender, pale; IV, . 52 mm ., pale to dusky. Pronotum: length .56 mm ., width at base .86 mm . General coloration greenish yellow, and darkened with fuscous nearly as in scparatus Uhler, but the fuscons points on corium much fainter and confined to inner half; length of antennal segment II about equal to basal width of pronotum plus width of head ( 1.32 mm .) .

ㅇ. Head: width .50 mm ., vertex .28 mm . Antemnae: segment I, length . 50 mm .; II, 1.20 mm ., length much greater than width of pronotum at base ; III, 1.52 mm . ; I $\backslash$. . 54 mm . Pronotum: length .54 mm ., width at base .91 mm .

Holotype: ō July 2t, 1920, Cranberry Lake, New York (C. J. Drake) : author's collection. Allotype: $\circ$ July 29, 1920, Wanakena, New York (C. J. Drake). Paratypes: of July 15, 1920, allotypic. ơ July 21, 1920, Branford, Connecticut (B. H. Walden). ot 2 \& July, 1888, Muskoka Lake District. Ontario (E. P. Van Duzee) : Iowa State College collection.

Macrolophus brevicornis new species.
Suggestive of longicomis but the antennae distinctly shorter, segment I not equal to width of head ; distinguished from separatus as shown in the key.

ठ. Length 3.6 mm ., width .96 mm . Head: width .48 mm ., vertex .26 mm .; lateral width of an eye .157 mm ., or a trifle greater than the space ( $.11+\mathrm{mm}$.) between eye and base of head where the collar normally fits against it. Rostrum, length $1.3+$ mm., reaching to middle of hind coxae. Antennae: segment I, length . 34 mm ., scarcely equal to width of vertex plus dorsal width of an eye; II, . 88 mm ., being a trifle longer than width of pronotum at base, the apical one-fourth blackish; 1I1. 1.03 mm ., length greater than segment II which is unusual in the family Miridae: $\mathrm{IV}^{\top}$, 43 mm . Pronotum: length $.5+$ mm ., width at base .84 mm .
9. Head: width .47 mm ., vertex .25 mm .; lateral width of an eye .157 mm ., space between eye and pronotal collar . 114 mm . Antennae: segment I, length .33 mm . ; II, . 75 mm ., not equal to width of pronotum at base ; III, 1 mm . ; IV', 38 mm . Pronotum: length .54 mm ., width at base .84 mm .; thus antennal segment II is not equal to basal width of pronotum in the female.

General coloration lemon yellow, sometimes greenish yellow ; head with a fuscous stripe behind dorsal margin of the eye; hemelytra with fuscous points more distinct than in longicornis, basal two-thirds of corium without fuscous points at base of hairs except one row bordering claval suture.

Holotypc: © August 19, 1920, Lakehurst, New Jersey (W'm. T. Davis): author's collection. Allotype: same data as the type. Paratypes: Iow - $2 \delta^{\circ}, 1$ 19. July 1, 189-4. of July 26. ơ Aug. 18, 1895, ㅇ June 20, 1896. Ames (E. D. Ball) : Iowa State College collection. Kansas-? "Kans." Mariland-ơ October 12, 1901, Glen Echo (O. H. Heidemann). Missocriof, Forest Park, St. Louis.

Key to the species of Macrolophus.

1. Length of antennal segment I equal to width of head across eyes.............................................. 2
Length of antennal segment I equal to or slightly greater than width of head across eyes; length of segment II distinctly greater than basal width of pronotum.
longicornis n. sp.
2. Head with postocular space nearly equal to lateral width of an eye, a fuscous stripe behind dorsal margin of eye ; antennal segment II with apical one-fourth blackish ; basal two-thirds of corium without fuscous points at base of hairs except one row bordering claval suture.
brevicornis n . sp.
Head with postocular space equal to little more than half the lateral width of an eye; antennal segment II narrowly fuscous at apex ; corium with three or four rows of fuscous points on basal two-thirds...........separatus Uhler

## Notes on the Acrididae of Brazos County, Texas (Orthoptera).

By I. A. Little, College Station, Texas
For the past two years the writer has intensively collected and made many notes upon this family. The work was not limited to the summer months alone but extended over the entire year. Much of the data of the seasonal appearance of the adults was obtained from caged specimens.

Brazos County is located in the east central part of Texas, about one hundred and fifty miles north of the Gulf of Mexico. It lies in that part of the Gulf Costal Plain known as the "East Texas Timber Belt." The general elevation ranges from two hundred to four hundred feet above sea level, sloping gently toward the southeast.

## Tryxalinae.

Mermiria bivittata Serville. Fairly common. Taken as early as May 29. Found usually in damp spots in rank grass.

Mermirla maculipennis maculipennis Bruner. Very rare.

Tryxalis brevicornis Linnaeus. Very rare. Not found earlier than the latter part of July.


[^0]:    *Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.

